DOCUMENT RESUME

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ABSTRACT

This student activity manual for primary students is designed to teach several metric units. Included are activities related to length, volume, mass, and temperature. This manual emphasizes learning to measure, reading instruments, spelling terms, and making comparisons. Activities include a variety of drill sheets interspersed with other activities. Cartoons are used extensively to appeal to student interests. (RH)

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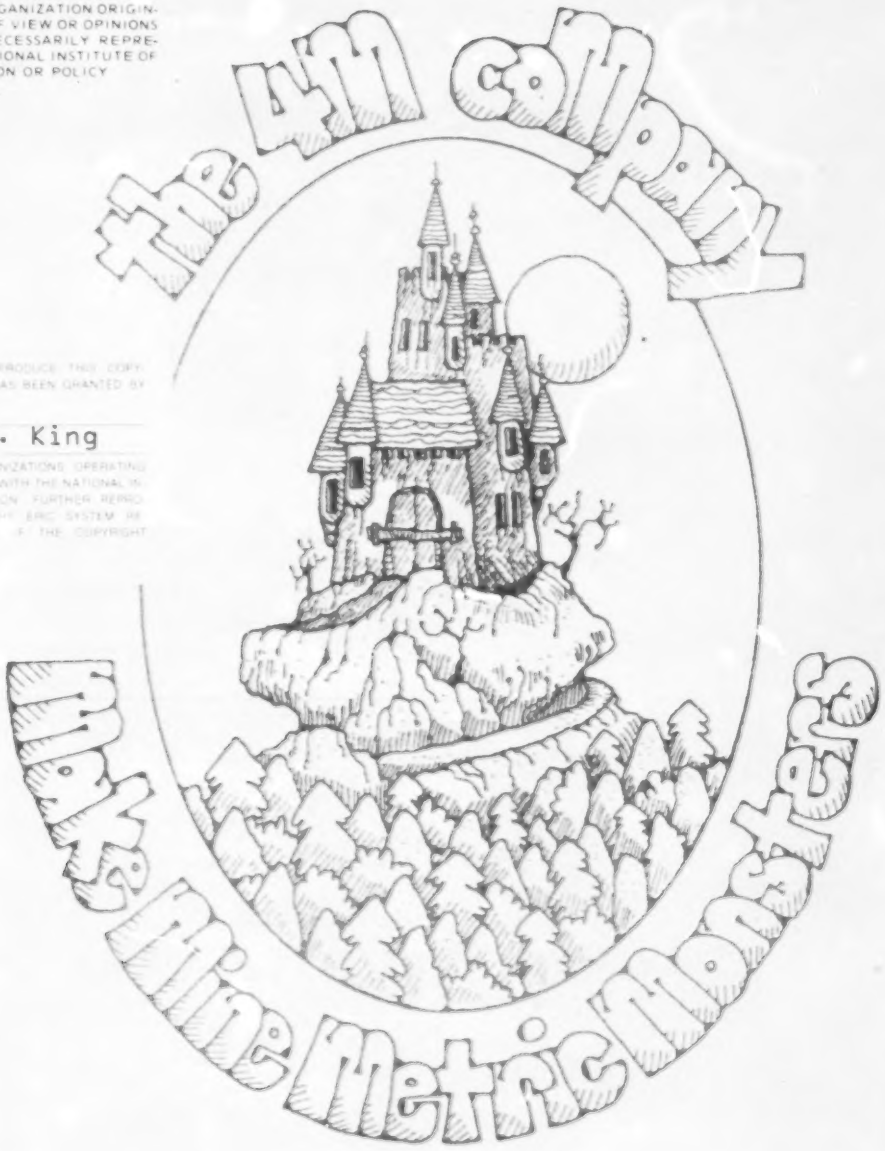

SE 022 574

presents

the metric system

starring the

MAKE MINE METRIC MONSTERS

project staff:

Irv King, Director

Kathleen Berg, Curriculum Planner

Kini Haines, Artist

a cooperative effort of
the University of Hawaii
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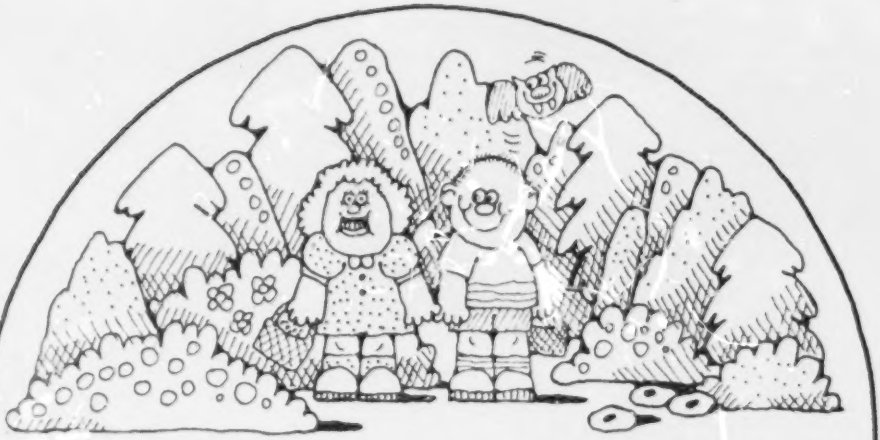
Make Mine Metric Monsters
DRACULITER
KILLER GRAM
SEEMORE CELSIUS
DR. FRANKEN
METER MUMMY
JANE AND JIM
IGOR
DR. FRANKEN'S STEIN



Jim and Jane went for a walk in the forest to pick blueberries. They soon became lost and wandered deeper and deeper into the forest. As it was getting dark, they saw a light. It was a huge, spooky castle. Jim knocked on the door, and a tall man in a white coat opened the door.

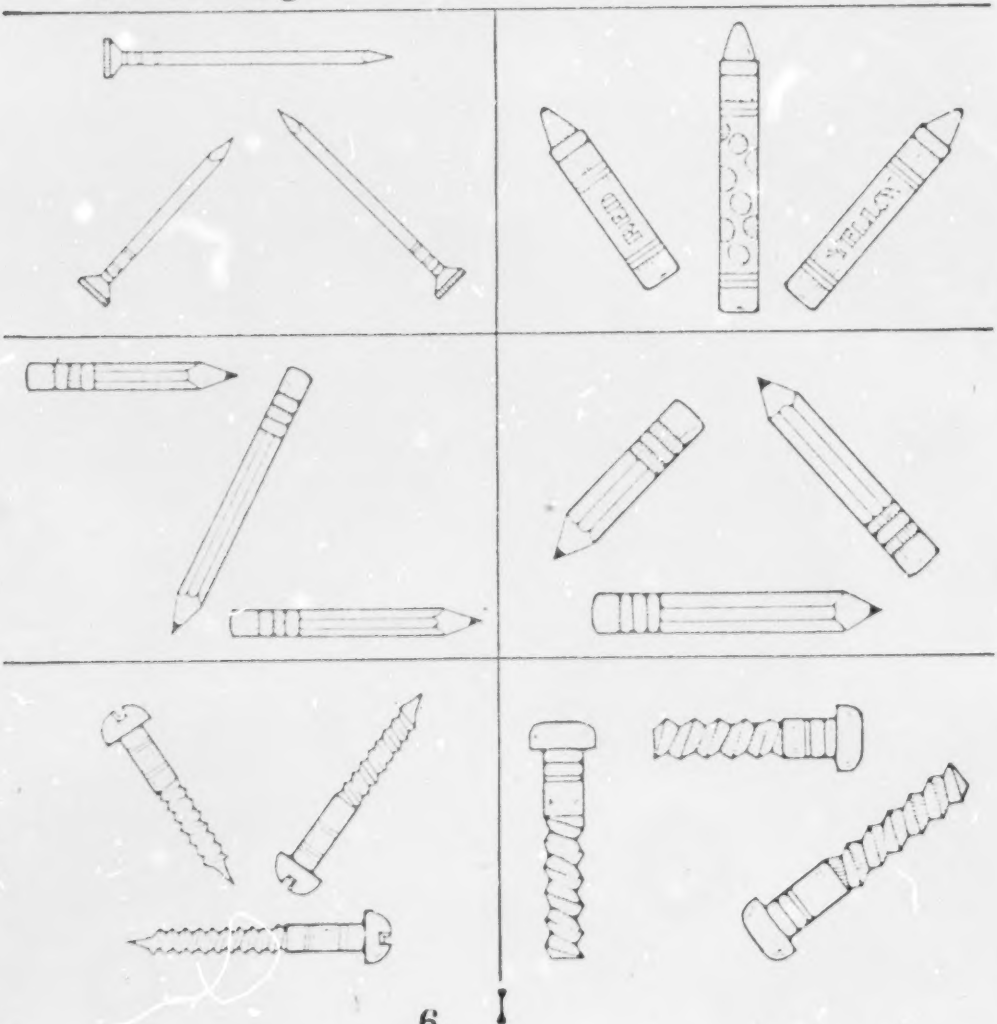
"Velcome, I am Dr. Franker., the mad scientist. Who are you?", he said.

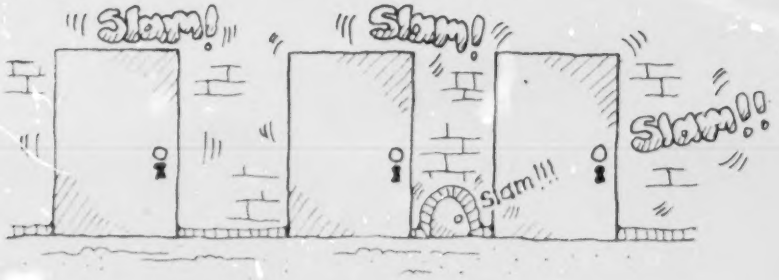
Jim and Jane explained their plight. Dr. Franken invited them into his castle.

"You are velcome to stay in the castle tonight. But, whatever you do, don't go into the Meter Room, the Liter Room, the Gram Room, or the Celsius Room. The secrets of the metric system are in these rooms, but there are also terrible monsters lurking there," he warned them.

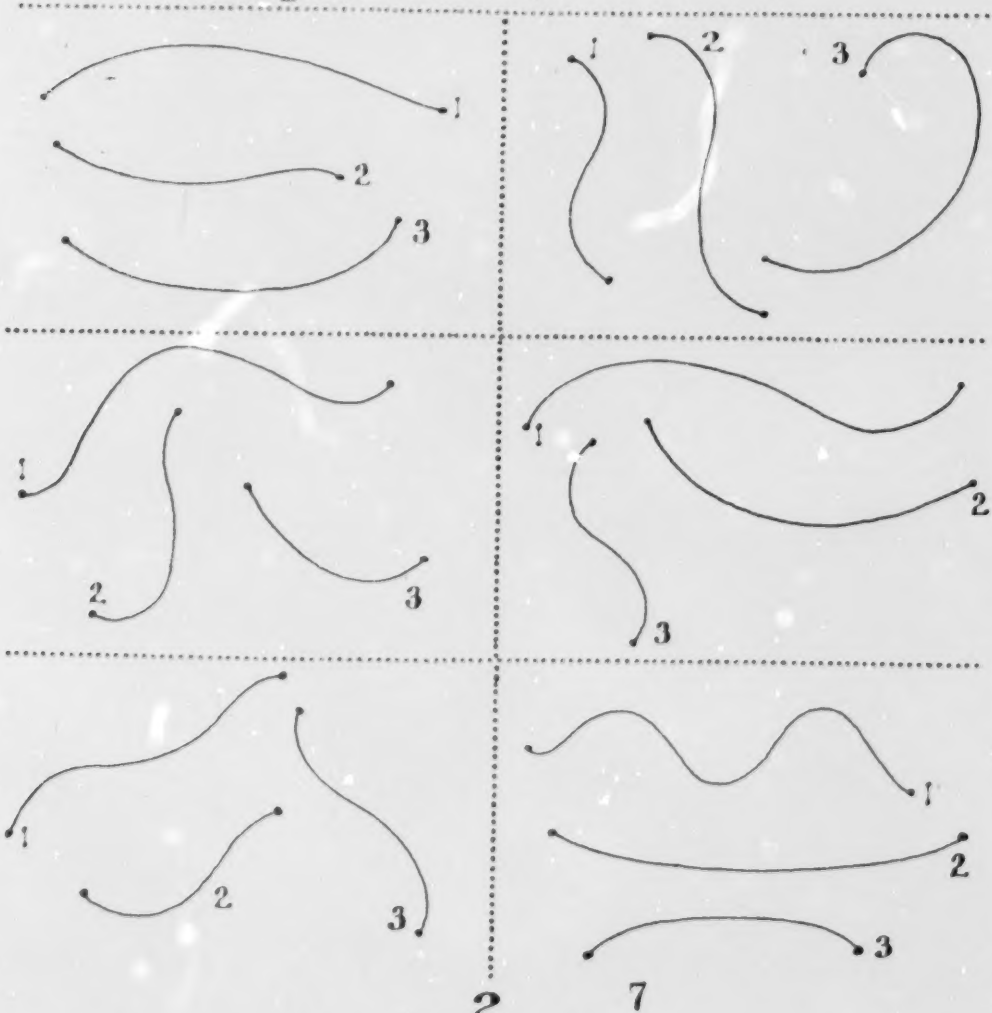
Dr. Franken and his assistant, Igor, then fed them supper and showed them to their rooms. To find out what happened next, read on...

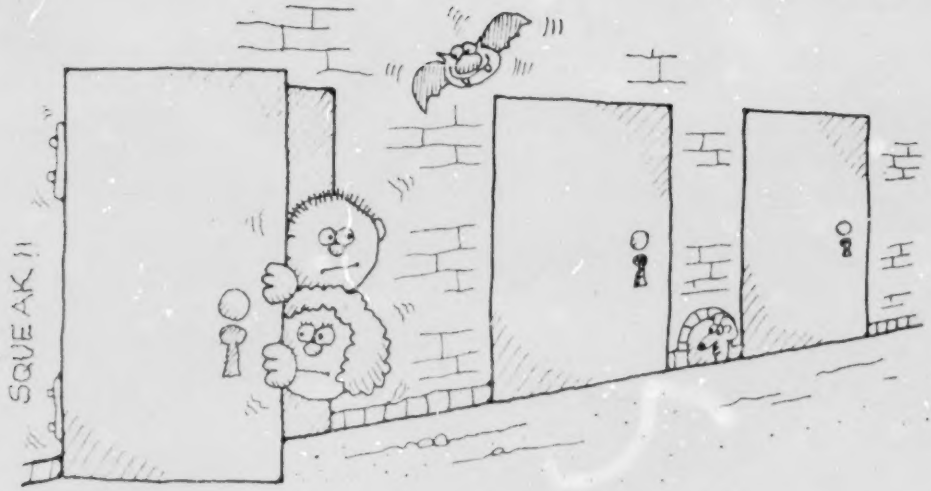
Mark the longest.





Mark the longest.

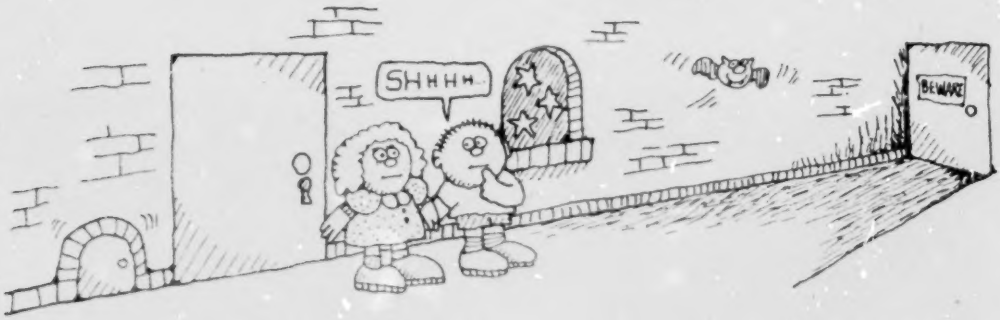




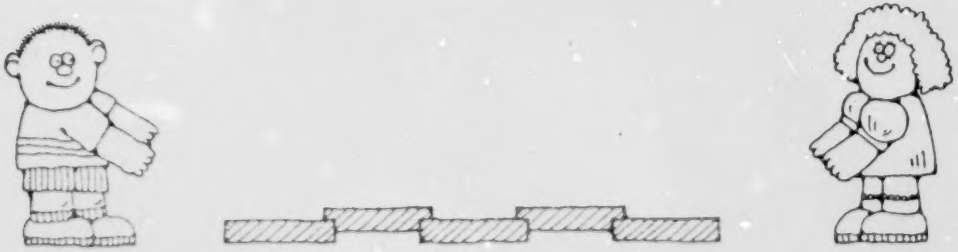
Measure your desk with crayons.

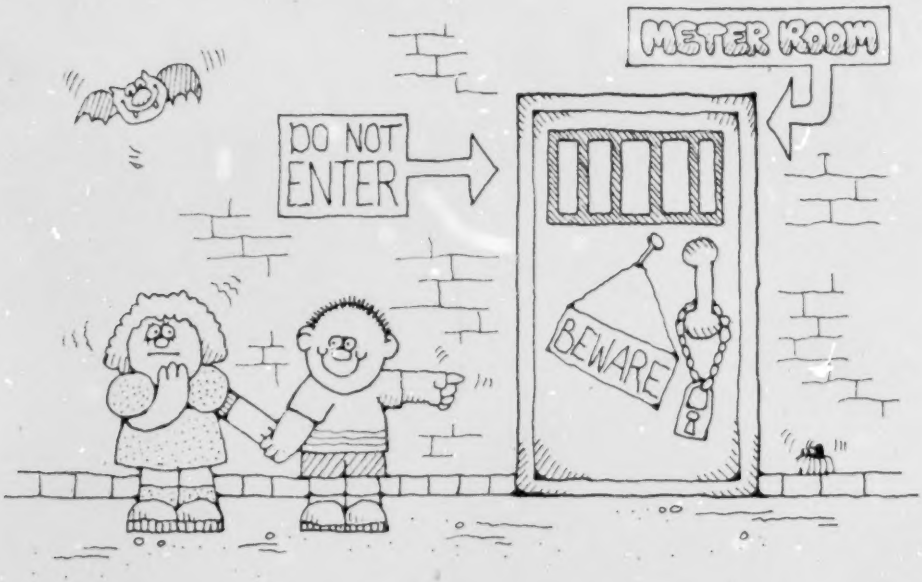
about _____ crayons

about _____ crayons



Which of these show the right way to measure?



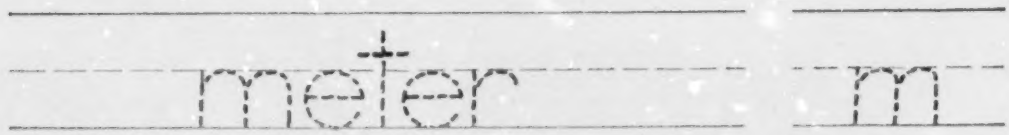


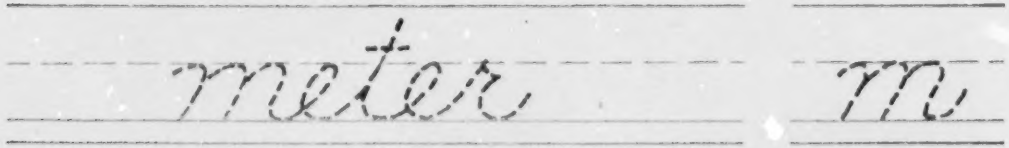
Use a meter. Measure the tapes on the floor. Write your answers here.

X about _____ meters

Y about _____ meters

Trace the dotted lines. Then write meter and its symbol on your own.

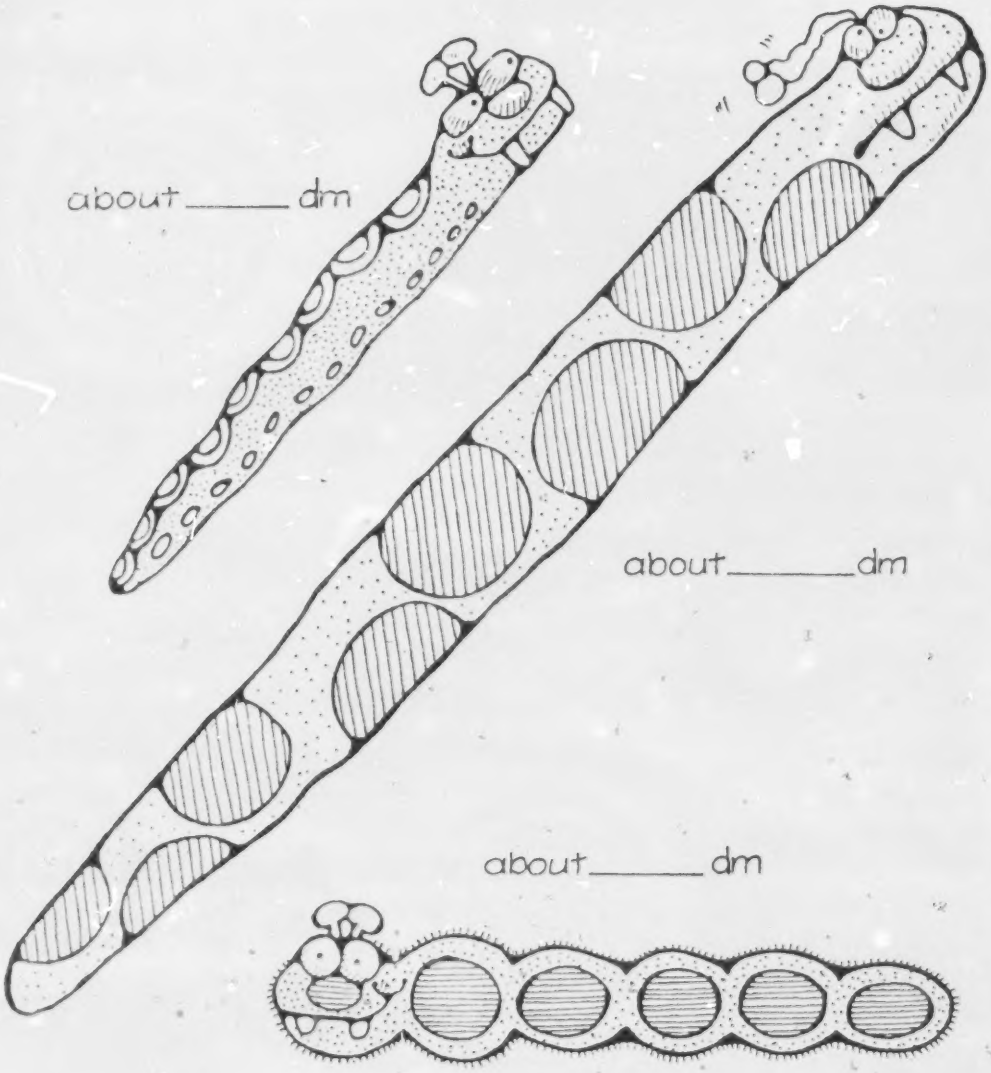




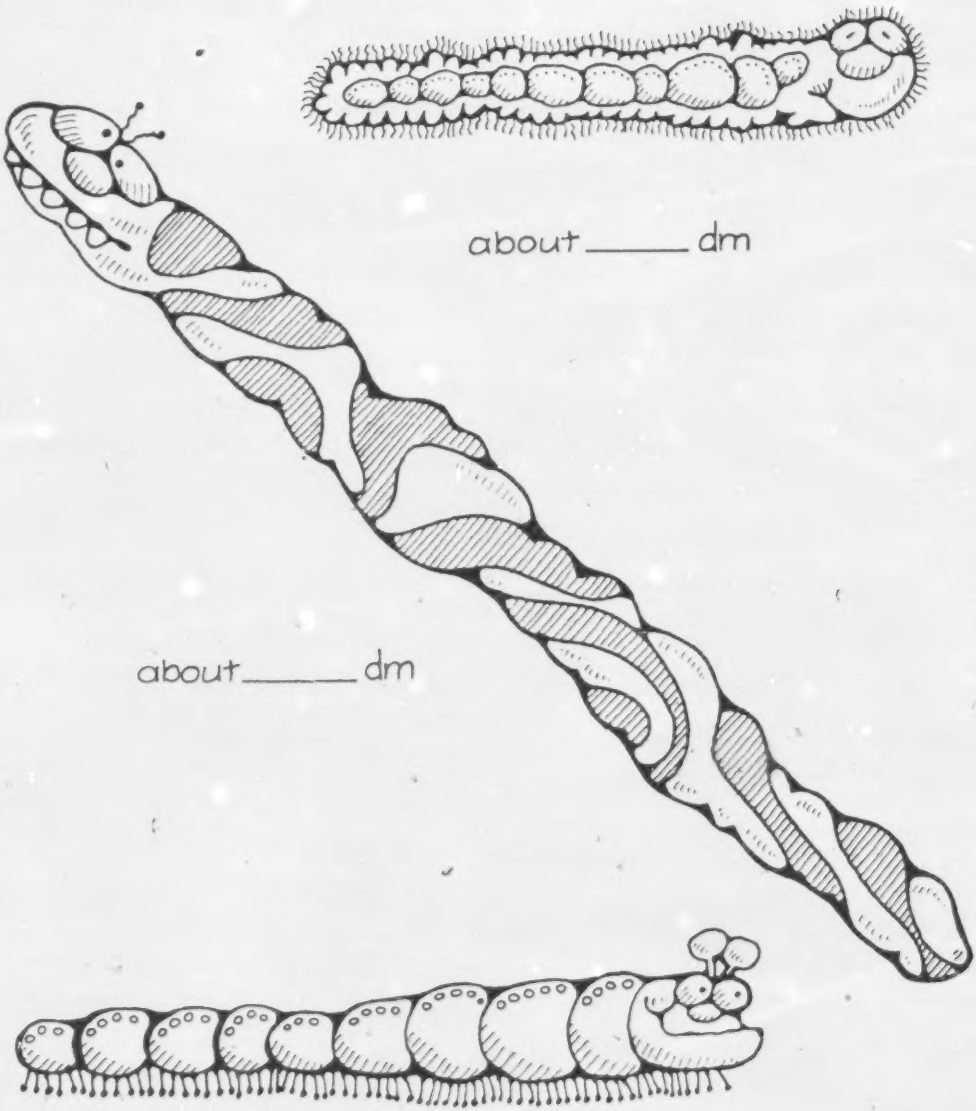
There are 2 words and 3 symbols for meter hidden in the picture. Can you find them?

7

Measure in decimeters.



8



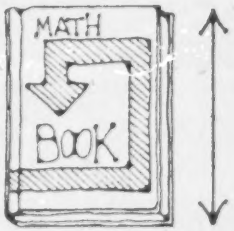
about _____ dm

about _____ dm

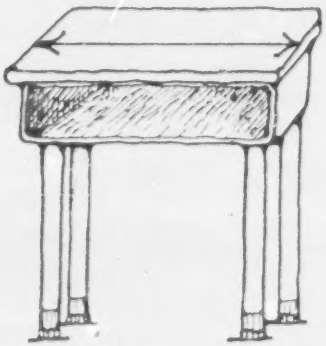
about _____ dm

Measure these objects in your classroom.

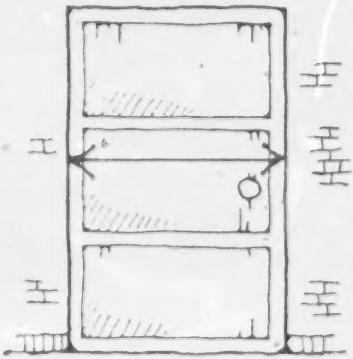
about_____dm



about_____dm

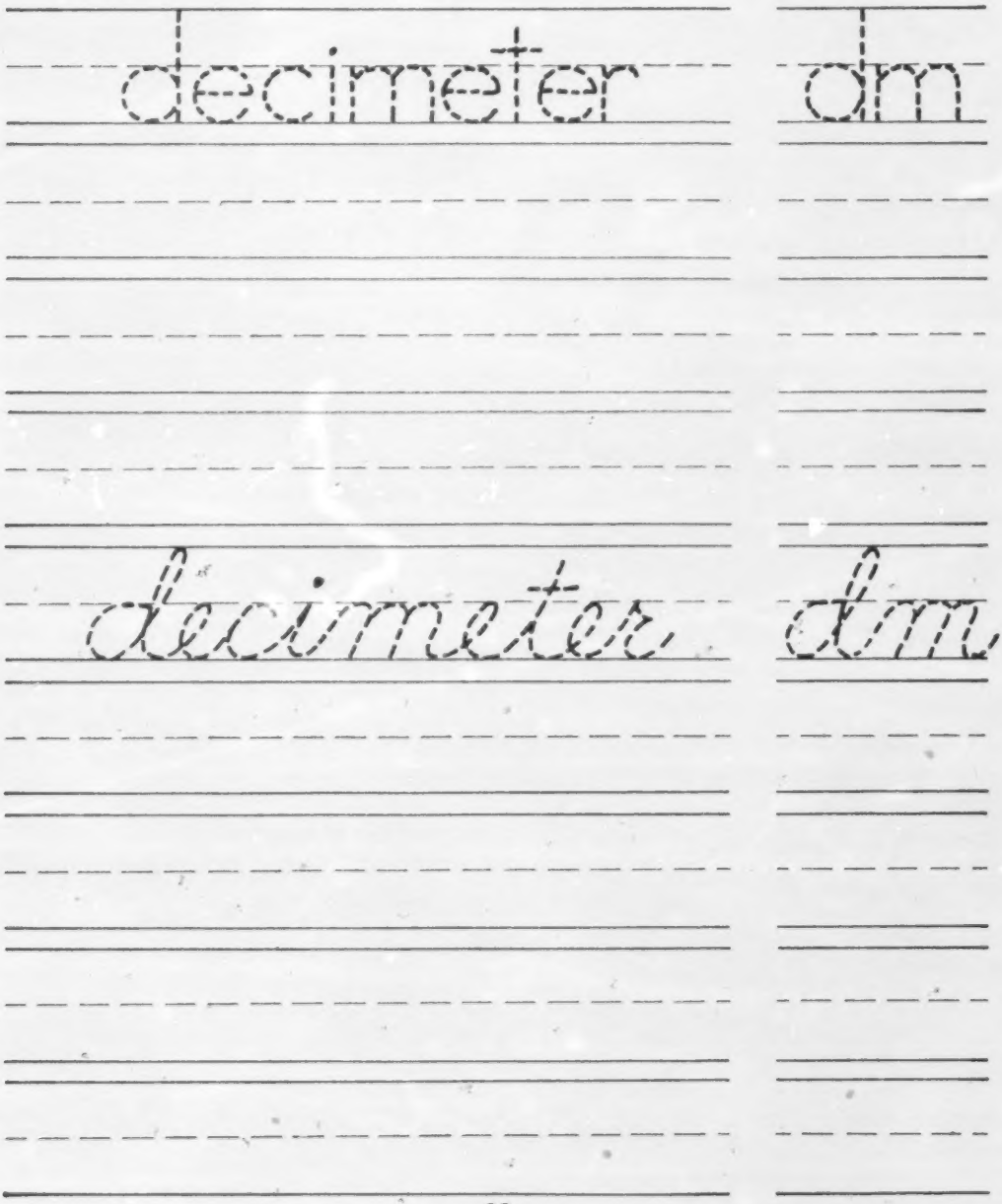


about_____dm

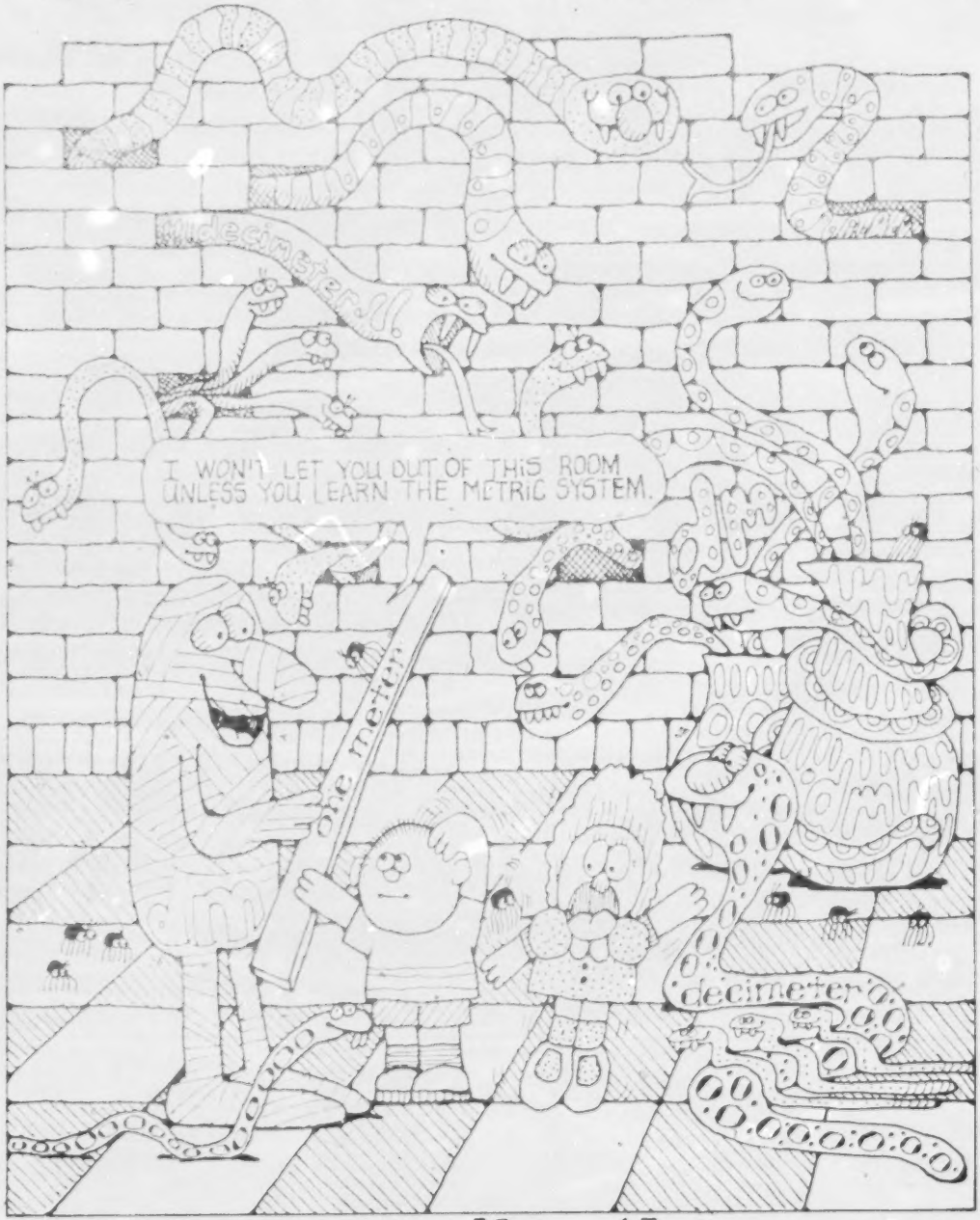


about_____dm

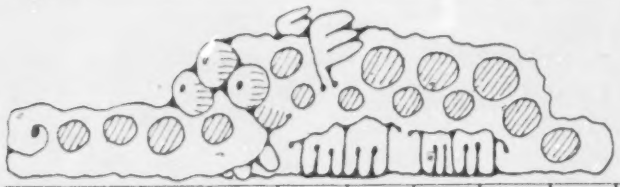
Trace the dotted lines. Then write decimeter and its symbol on your own.



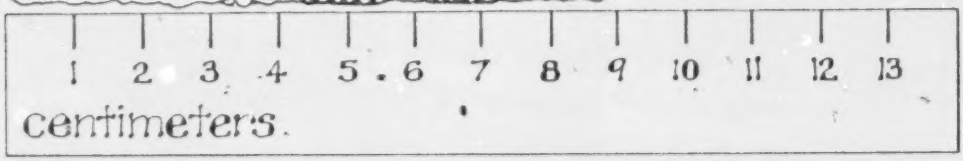
There are 2 words and 3 symbols for decimeter hidden in the picture. Can you find them?



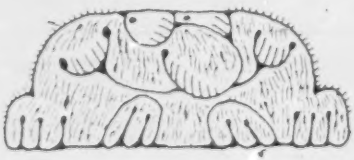
Turn to the back of your book and cut out your centimeter ruler. Use it to measure these pictures.



about_____cm

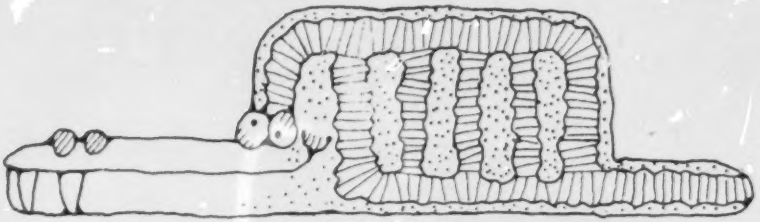


about_____cm



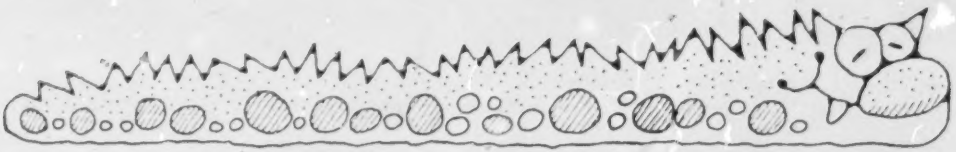
about_____cm

Measure these.

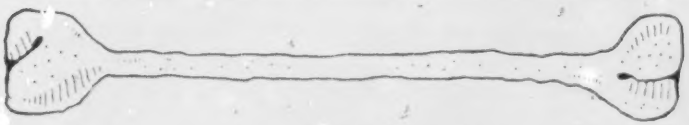


about ___ cm

about _____ cm



about _____ cm



about _____ cm

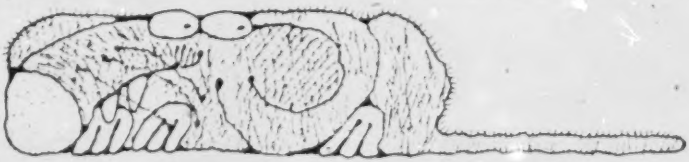
about _____ cm

Help measure these rats.

about ___ ___ cm

about _____ cm

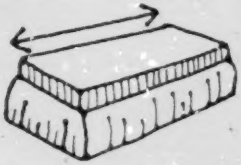
about _____ cm



about _____ cm

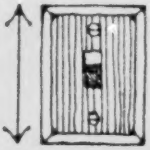
about _____ cm

about _____ cm



about _____ cm

about _____ cm



about _____ cm

about _____ cm

Trace the dotted lines. Then write centimeter and its symbol on your own.

centimeter cm

centimeter cm

Let's add meters.
Label your answers.

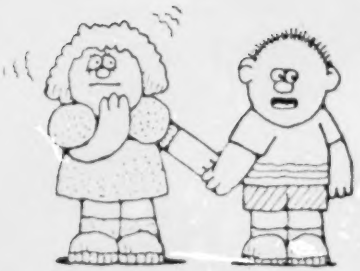
2 m	5 m	3 m	6 m	4 m	3 m
+3 m	+5 m	+4 m	+3 m	+4 m	+5 m
m					

Let's add decimeters.
Label your answers.

3 dm	2 dm	4 dm	8 dm	5 dm	2 dm
+1 dm	+5 dm	+5 dm	+2 dm	+3 dm	+4 dm
dm					

Let's add centimeters.
Label your answers.

4 cm	2 cm	1 cm	3 cm	6 cm	5 cm
+6 cm	+2 cm	+7 cm	+3 cm	+2 cm	+4 cm
cm					



Let's subtract meters.
Label your answers.

6 m	7 m	8 m	5 m	4 m	8 m
-3 m	-2 m	-6 m	-3 m	-2 m	-4 m

m

Let's subtract decimeters.
Label your answers.

9 dm	8 dm	7 dm	6 dm	5 dm	4 dm
-5 dm	-3 dm	-4 dm	-2 dm	-2 dm	-3 dm

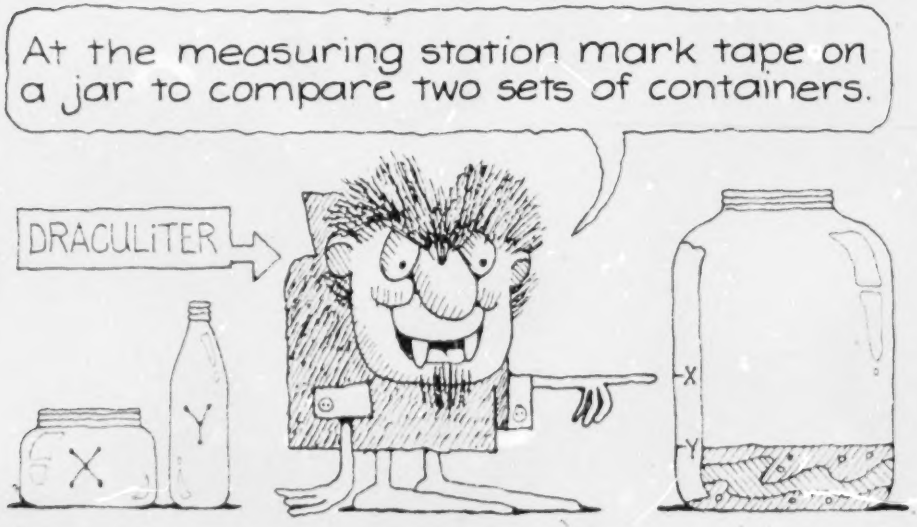
dm

Let's subtract centimeters.
Label your answers.

10 cm	9 cm	8 cm	7 cm	10 cm	9 cm
-4 cm	-6 cm	-2 cm	-5 cm	-3 cm	-4 cm

cm

Meanwhile, inside the **Liter Room**...



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1. Circle the one that holds the **most**

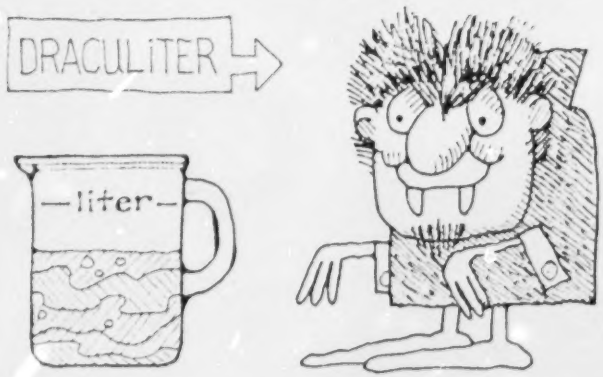
container 1
container 2
container 3

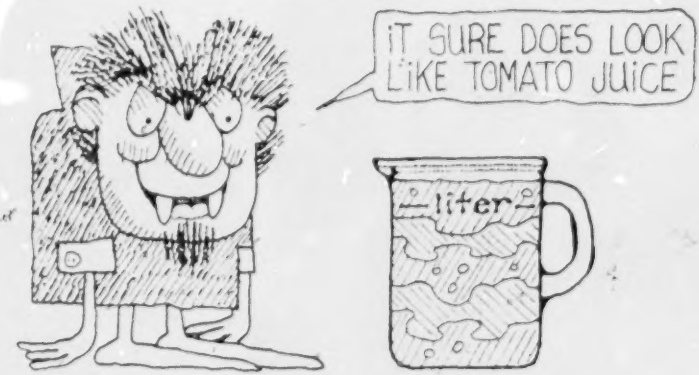
---

2. Circle the one that holds the **least**

container A
container B
container C

Which of these shows the right way to measure with liters?





Trace the dotted lines. Then write liter and its symbol on your own.

liter l

liter l

There are 2 words and 3 symbols for liter hidden in the picture. Can you find them?

Secret Code

2	3	4	5	6	7	8	9
L	E	S	T	A	R	I	N

$$\begin{array}{rrrrr} 4 & 10 & 8 & 6 & 9 \\ -\,2 & -\,2 & -\,3 & -\,3 & -\,2 \\ \hline \end{array} \qquad \begin{array}{rr} 4 & 2 \\ +\,4 & +\,2 \\ \hline \end{array}$$

2

L

$$\begin{array}{rrrrrr} 4 & 2 & 3 & 3 & 0 & 5 \\ +\,5 & +\,1 & +\,3 & +\,2 & +\,3 & +\,2 \\ \hline \end{array}$$

29

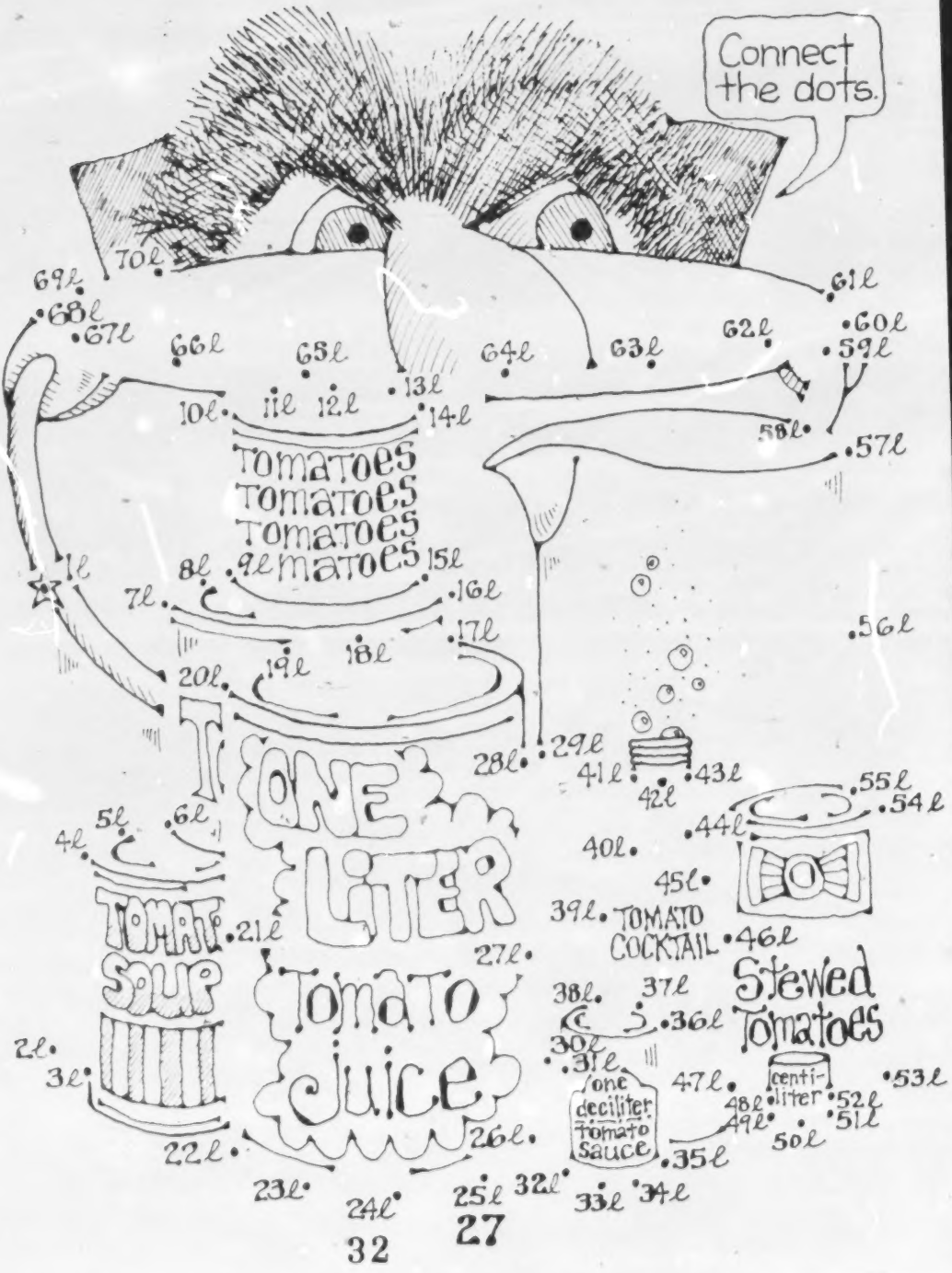
Capacity of container A about _____ liters

Capacity of container B about _____ liters

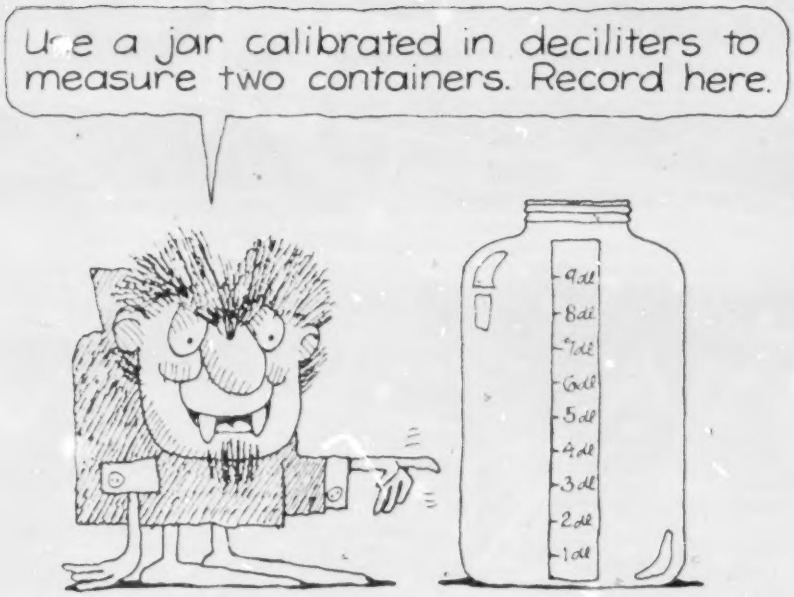
Trace the dotted lines. Then write deciliter and its symbol on your own.

deciliter dl

deciliter *dl*


Connect the dots.
TOMATOES TOMATOES TOMATOES TOMATOES
ONE LITER
TOMATO JUICE
TOMATO SOUP
TOMATO COCKTAIL
Stewed Tomatoes
one deciliter tomato sauce
centi-liter

32 27



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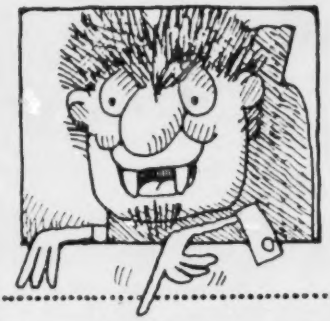
container X holds _____ deciliters

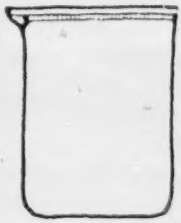
container Y holds _____ deciliters

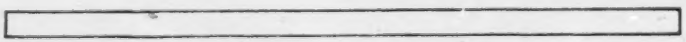
Draw lines to match the unit with its picture.



meter

liter

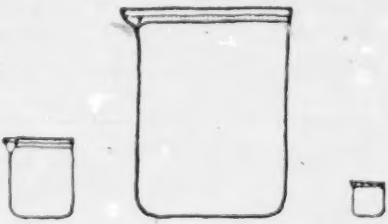




centimeter

meter

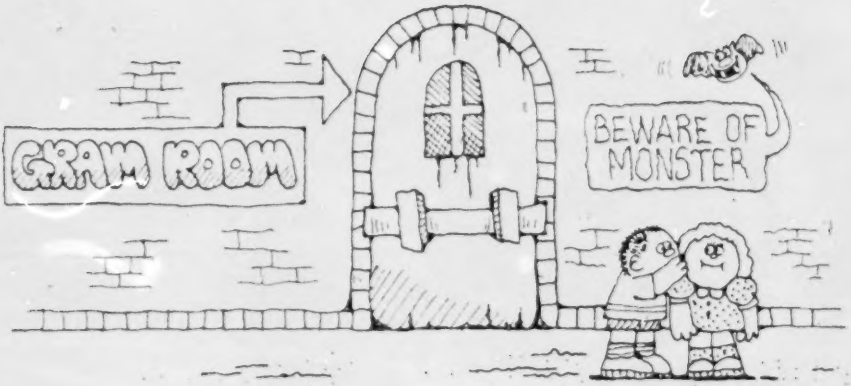
decimeter



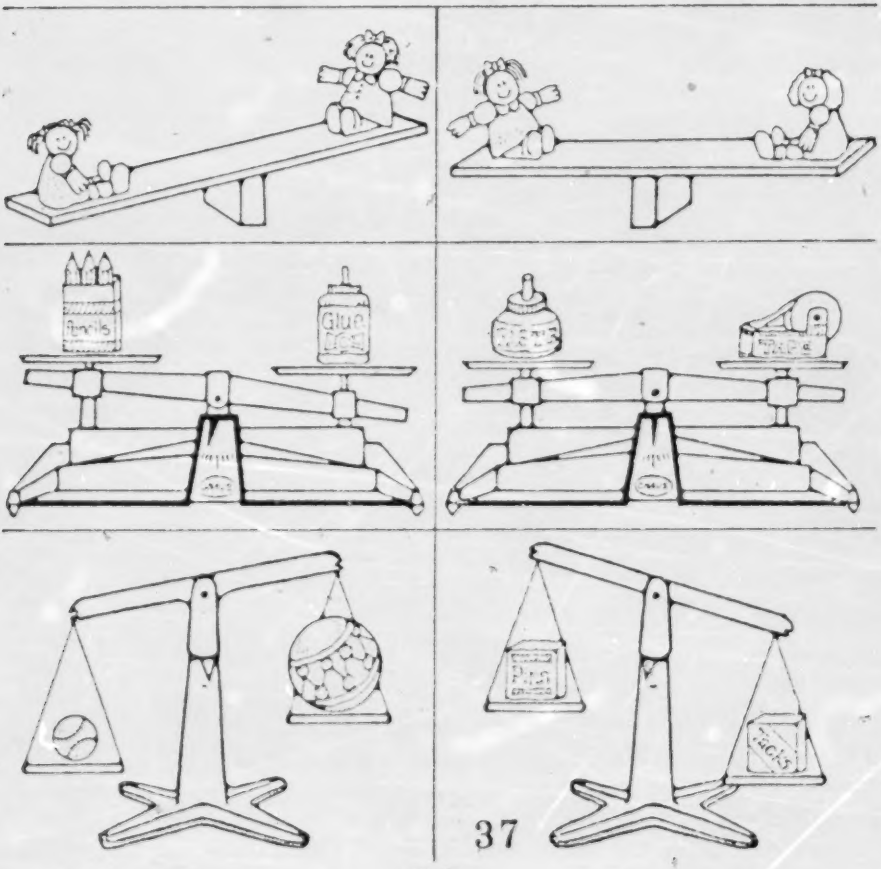
liter deciliter centiliter

2 ℓ +2 ℓ	4 ℓ +5 ℓ	5 ℓ +3 ℓ	3 ℓ +4 ℓ	8 ℓ +1 ℓ	7 ℓ +3 ℓ
ℓ					
3 dℓ +3 dℓ	4 dℓ +2 dℓ	5 dℓ +2 dℓ	6 dℓ +3 dℓ	8 dℓ +2 dℓ	5 dℓ +5 dℓ
dℓ					
6 cℓ +2 cℓ	5 cℓ +1 cℓ	7 cℓ +2 cℓ	1 cℓ +6 cℓ	2 cℓ +3 cℓ	4 cℓ +3 cℓ
cℓ					

9ℓ − 1ℓ = ℓ	7ℓ − 7ℓ	6ℓ − 0ℓ	10ℓ − 5ℓ	9ℓ − 8ℓ	7ℓ − 2ℓ
6dℓ − 1dℓ = dℓ	9dℓ − 3dℓ	7dℓ − 5dℓ	6dℓ − 2dℓ	10dℓ − 1dℓ	8dℓ − 4dℓ
7cℓ − 6cℓ = cℓ	4cℓ − 2cℓ	9cℓ − 5cℓ	5cℓ − 3cℓ	8cℓ − 5cℓ	5cℓ − 1cℓ

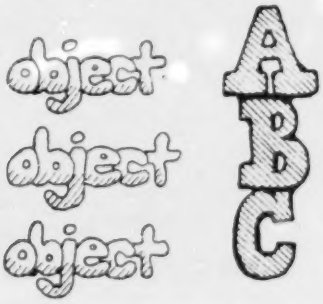


Discuss these pictures.

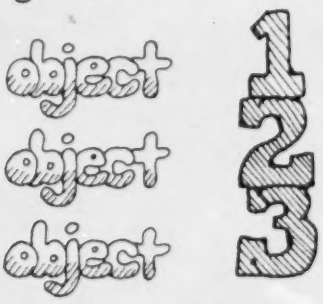


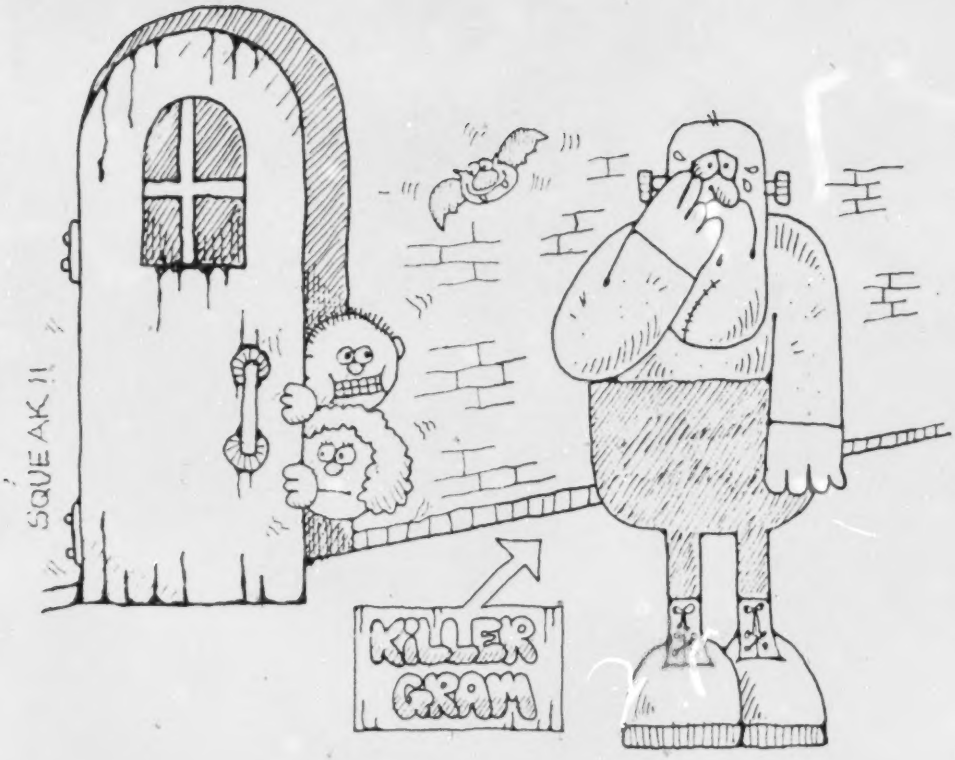
Use the balance.

Circle the heaviest.



Circle the lightest.





Use a balance and paper clips.

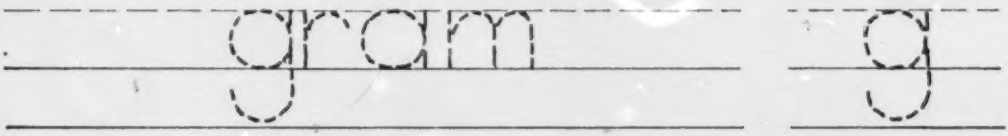
object 1 weighs _____ paper clips

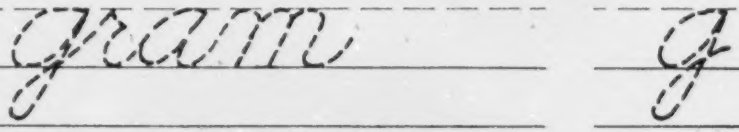
object 2 weighs _____ paper clips

object 3 weighs _____ paper clips

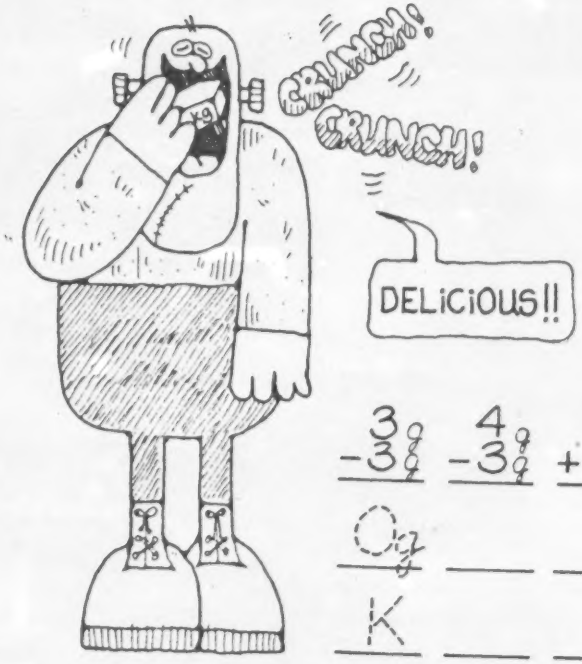
39

Trace the dotted lines. Then write gram and its symbol on your own.





There are 2 words and 3 symbols for gram hidden in the picture. Can you find them?



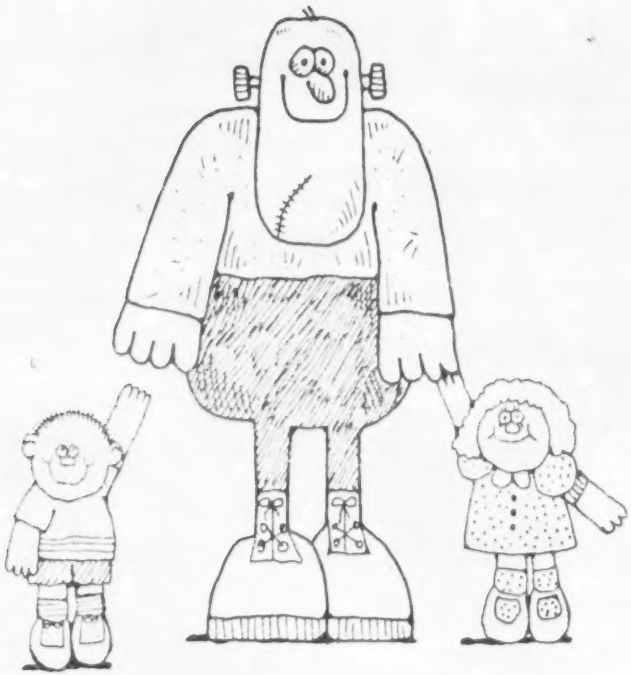
SECRET CODE

0g = K	6g = A
1g = I	7g = T
2g = L	8g = O
3g = E	9g = G
4g = R	10g = M
5g = S	

3g − 3g	4g − 3g	1g + 1g	3g − 1g	1g + 2g	2g + 2g
0g					
K					

4g + 5g	5g − 1g	2g + 4g	5g + 5g	7g − 4g	3g + 3g	6g + 1g	2g + 3g

6g − 6g	1g + 0g	1g + 1g	6g + 2g	7g + 2g	6g − 2g	1g + 5g	6g + 4g	6g − 1g

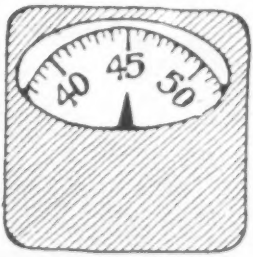


A about_____grams

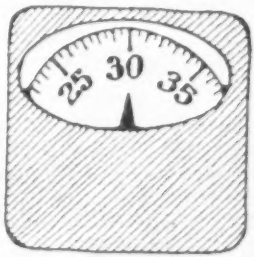
B about_____grams

43

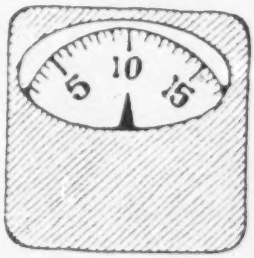
Read these scales in kilograms.



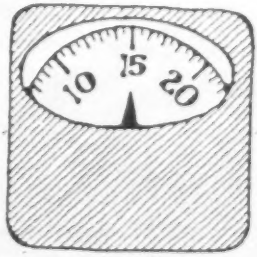
_____kilograms



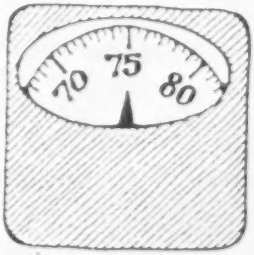
_____kilograms



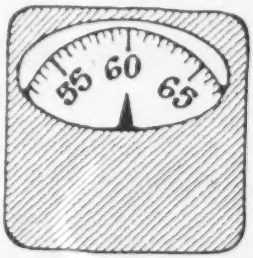
_____kilograms



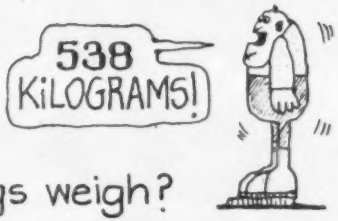
_____kilograms



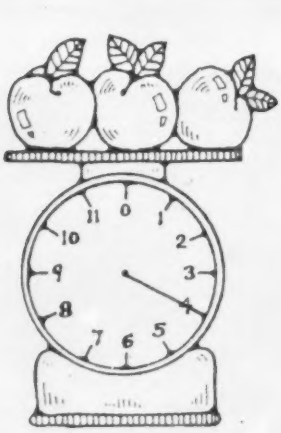
_____kilograms



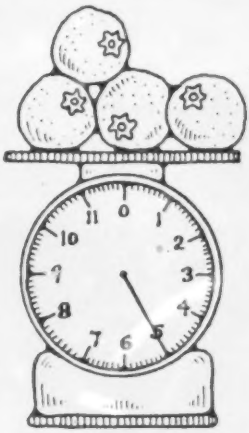
_____kilograms



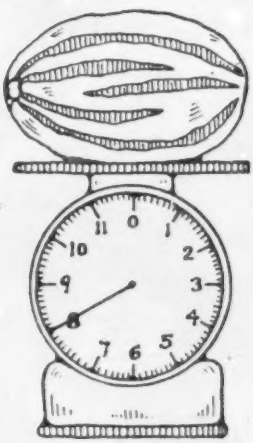
How much do these things weigh?



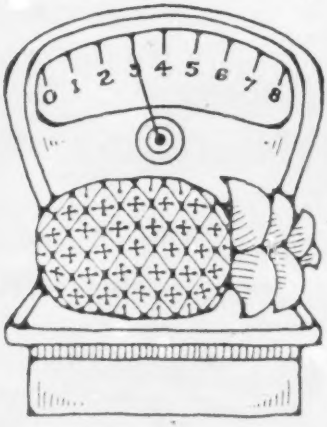
____kilograms



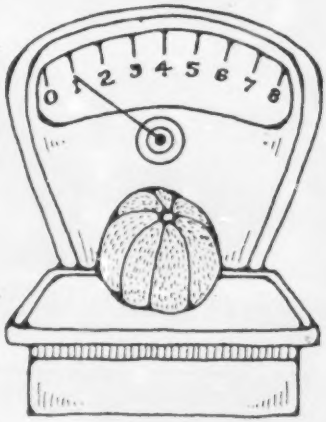
____kilograms



____kilograms



____kilograms

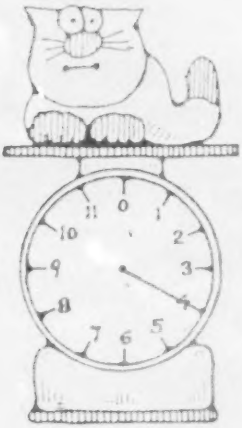


____kilograms

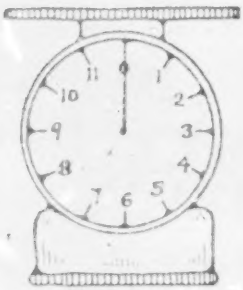
45

40

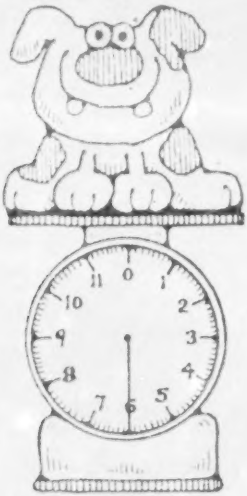
How much do these things weigh?



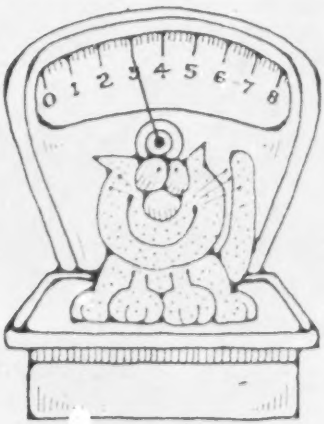
____ kilograms



____ kilograms

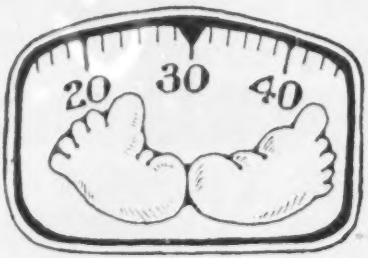


____ kilograms

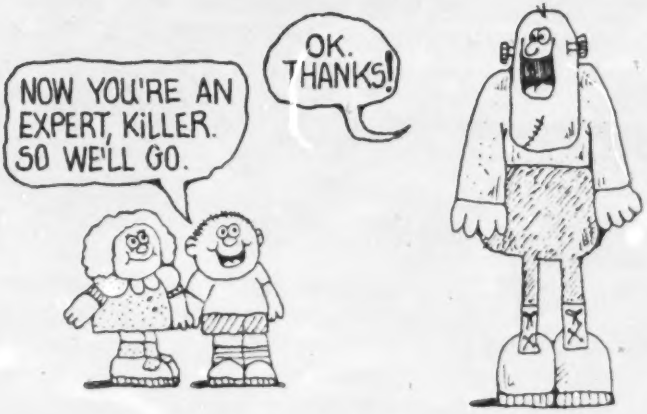


____ kilograms

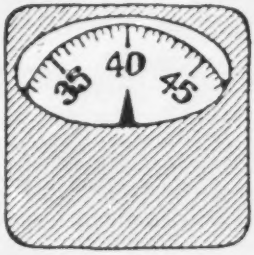
____ kilograms



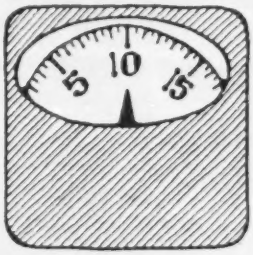
____ kilograms



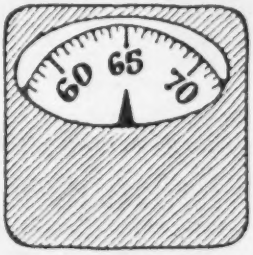
Read these scales in kilograms.



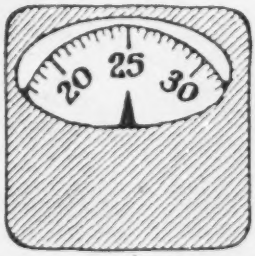
_____kilograms



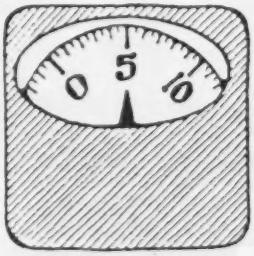
_____kilograms



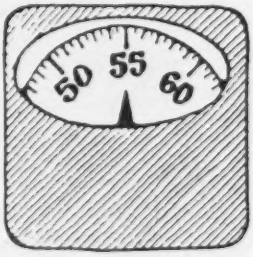
_____kilograms



_____kilograms



_____kilograms



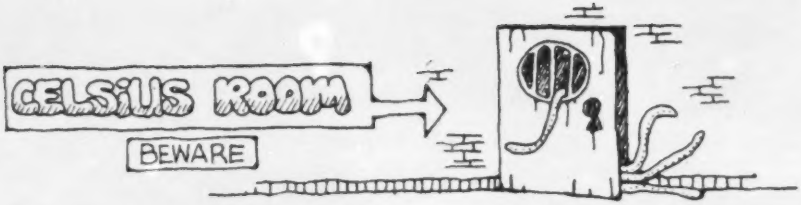
_____kilograms

Trace the dotted lines. Then write kilogram and its symbol on your own.

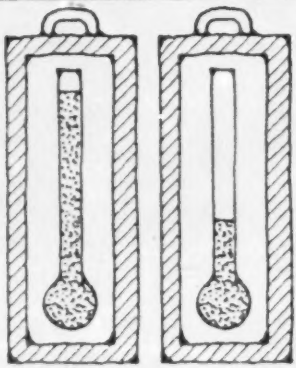
kilogram kg

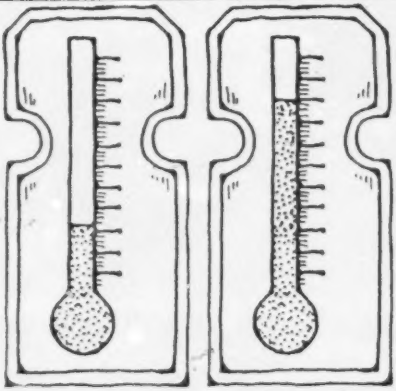
kilogram *kg*

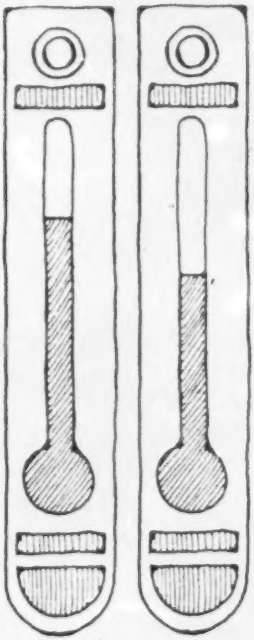
How much do you weigh? _____ kilograms

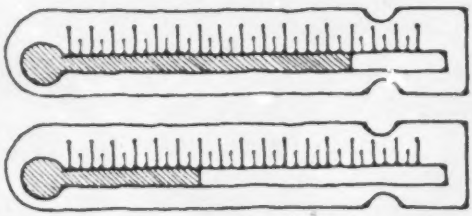


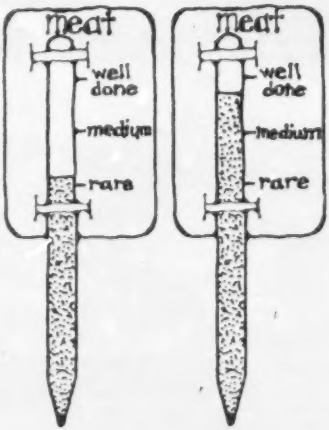
Mark each thermometer that shows it is warmer.



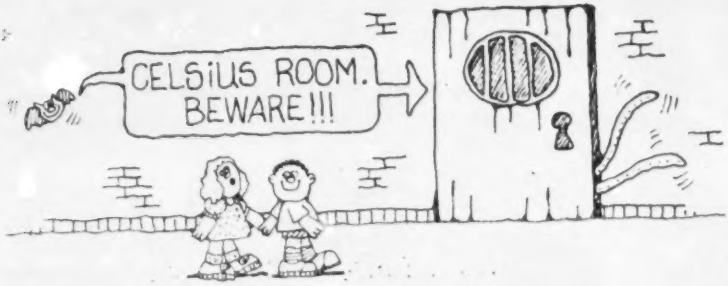




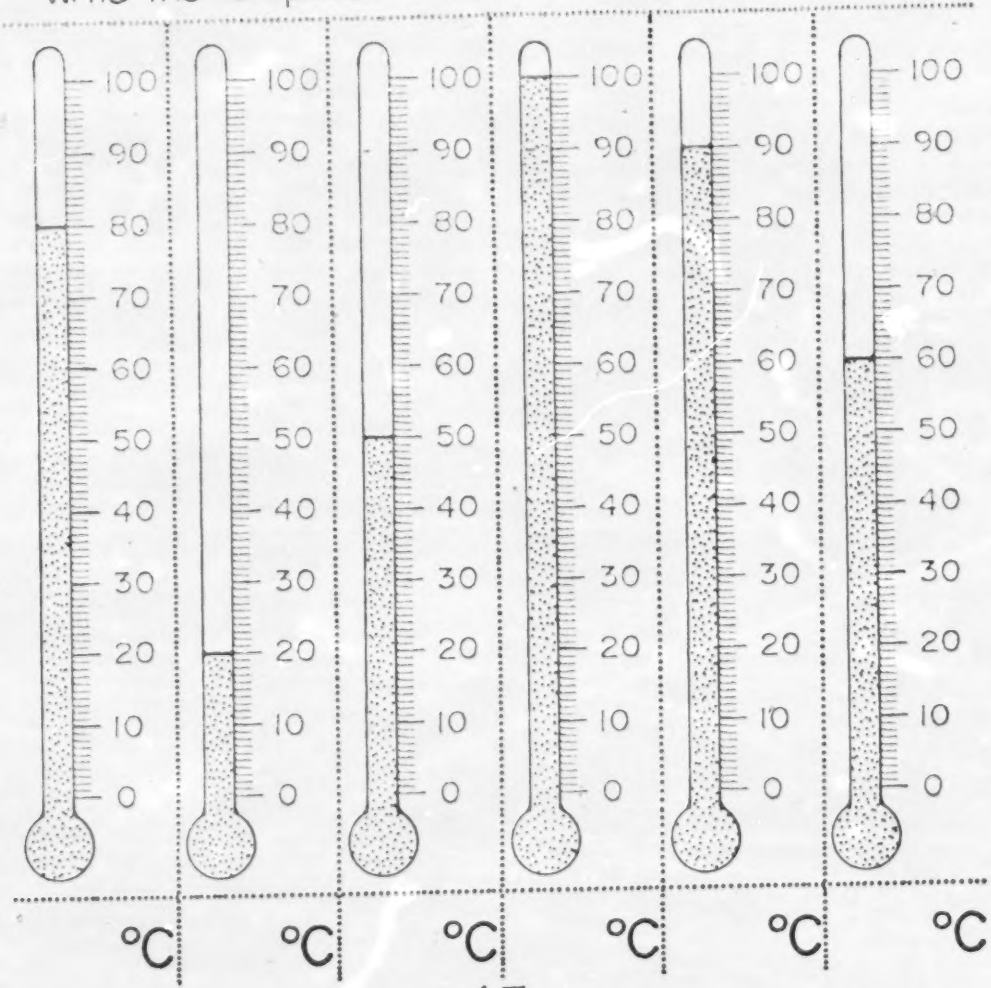


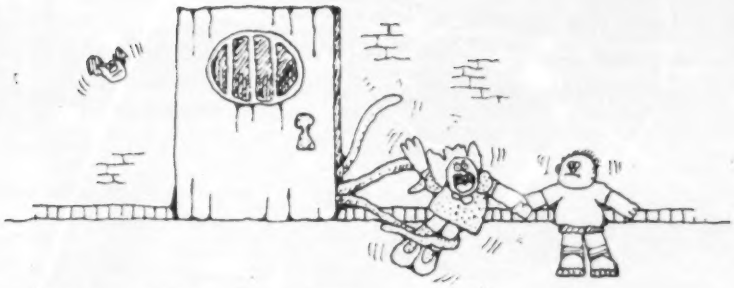


44

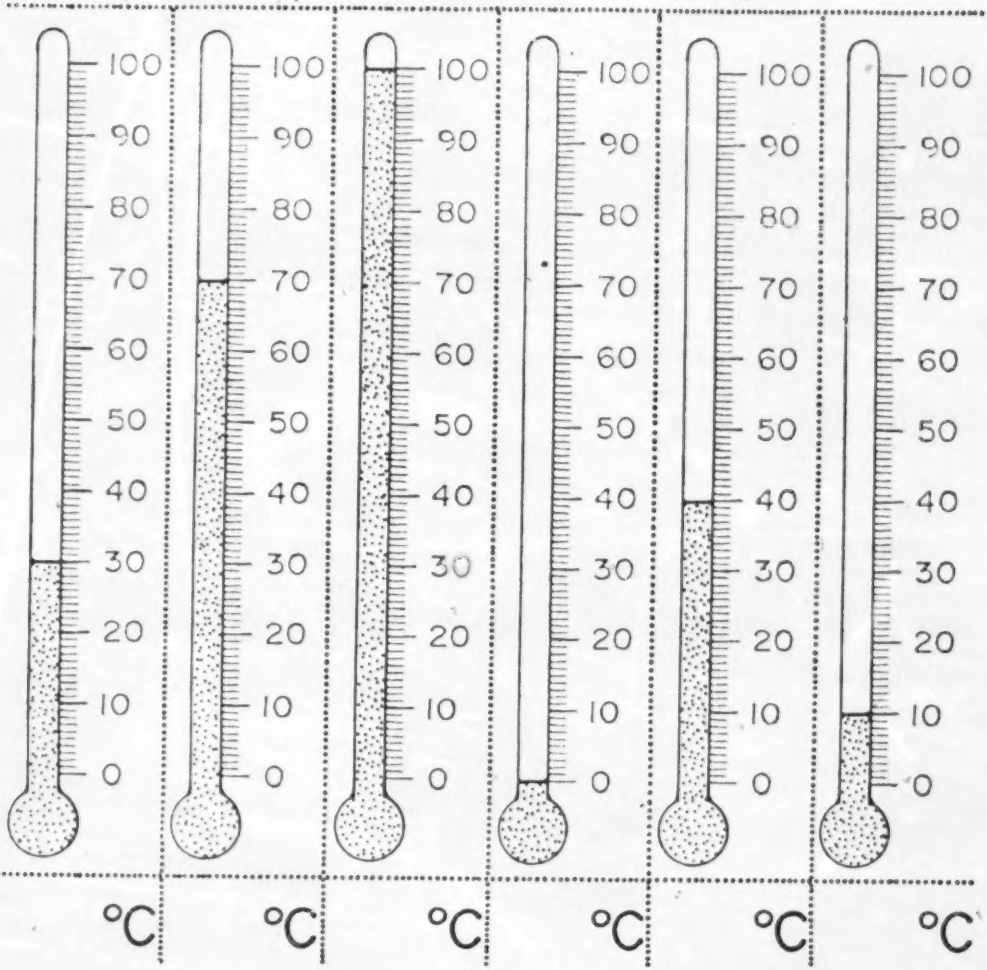


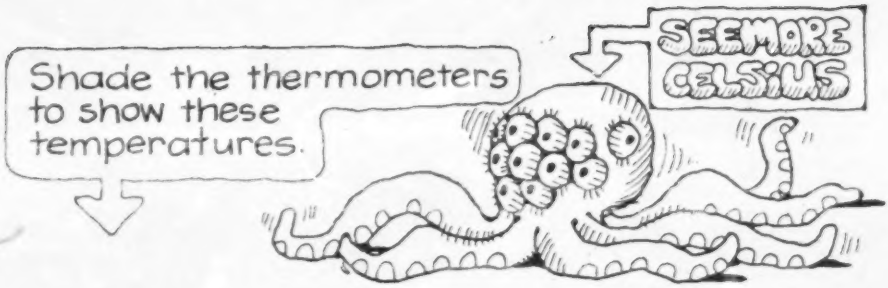
Write the temperatures.

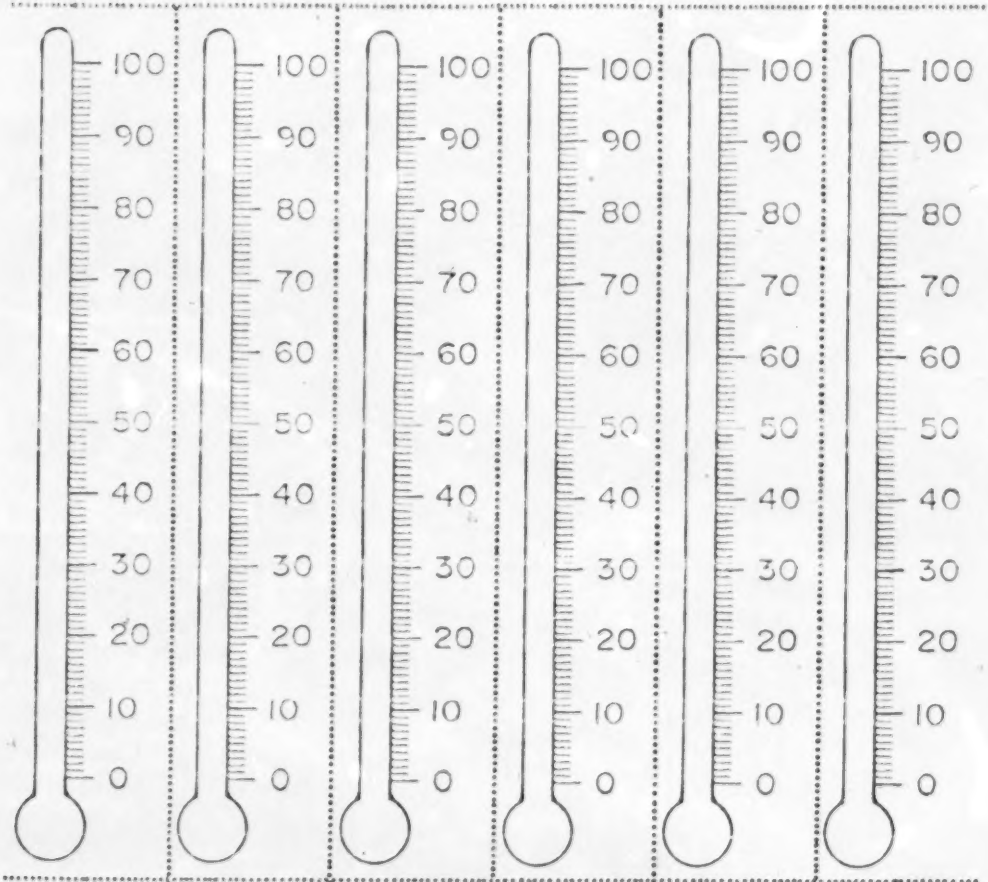




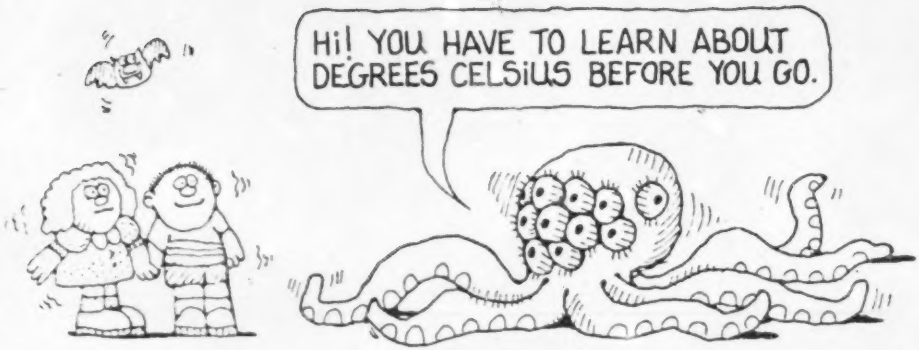
Write the temperatures.





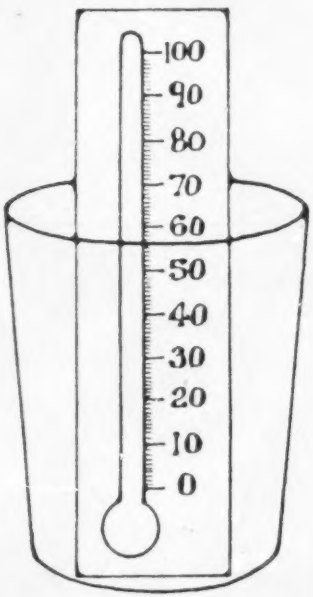


20 °C 50°C 60°C 90°C 100 °C 80 °C

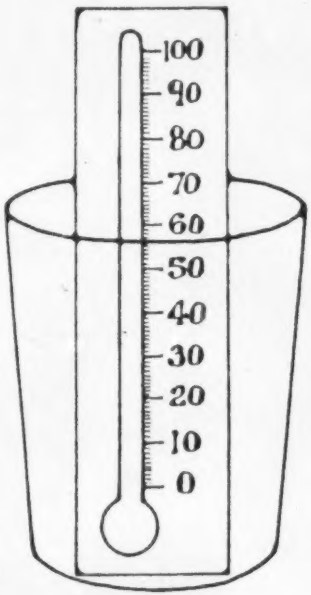


Read the two thermometers at the measuring station.

A _____°C



B _____°C



My name is: _____

_ _ _ _ _ _ _ _ _ _ _ _ _

_____

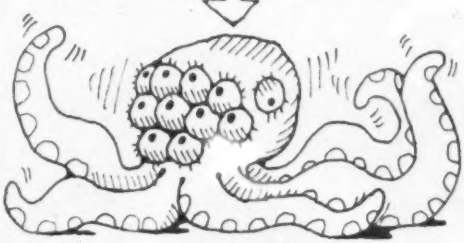
1

I am

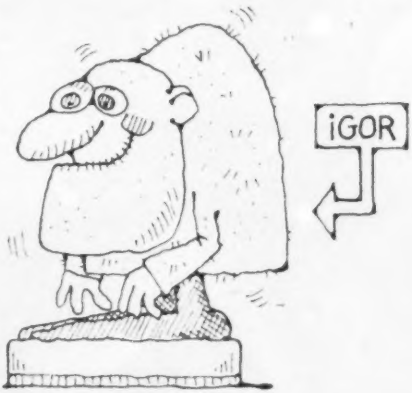
_____

years old.

SEEMORE CELSIUS



2



I weigh

_____ kilograms.

3

My bare foot is

_____ cm long.

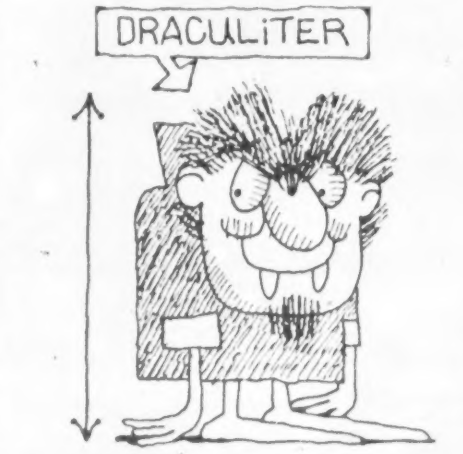
4

KILLER GRAM
My chest is
_____ cm around.

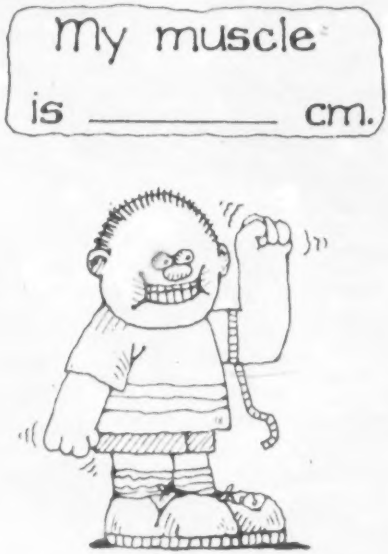
5

My waist
is _____ cm.
METER MUMMY

6


DRACULITER
My height is ____ cm.

7


My muscle
is _____ cm.

8

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
centimeters

dm
dm
dm
dm
dm
dm
dm
dm
dm
dm

53

56

NOW YOU HAVE LEARNED THE SECRETS OF THE METRIC SYSTEM. USE THEM WISELY, CHILDREN.
GOOD BYE